

REMARKS

Claims 1-21 were pending in the application; the status of the claims is as follows:

Claims 3 and 10-21 are withdrawn from consideration.

Claims 1, 2, and 4 are rejected under 35 U.S.C. § 102(b) as being anticipated by Japanese Patent Application No. 2000-225772A to Matsuda et al. ("Matsuda").

Claims 5-9 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Matsuda.

Claims 22 and 23 have been added.

Claim 1 has been amended to further specify and distinctly claim the invention. These changes do not introduce any new matter. Support for the amendments to claim 1 is found in paragraph [0022] of the specification.

35 U.S.C. § 102(b) Rejection

The rejection of claims 1, 2, and 4 under 35 U.S.C. § 102(b) as being anticipated by Matsuda, is respectfully traversed based on the following.

Matsuda describes a process where a liquid crystal layer is heated to an isotropic phase and then cooled to fix a cholesteric reflective color in the liquid crystal layer. At least a part of the material is then heated again to crystallize the liquid crystal layer to form a white color display state (paragraph [0008]). A white display state indicates random crystallization of the liquid crystal layer and is inconsistent with a cholesteric reflective state.

In contrast to the cited references, claim 1 includes:

a second heating process for heating at least a part of an area of the recording medium to a second temperature, wherein:

said second temperature causes the at least part of an area where the image has been formed by the first heating process to discolor or develop color without external pressure, and the second temperature causes the at least part of an area to exhibit a cholesteric fixed phase after cooling.

The cited reference does not show or suggest a second heating process for causing a cholesteric fixed phase. To show anticipation, the cited reference must show, expressly or inherently, every element of the claim. MPEP §2131. Therefore, Matsuda does not anticipate claim 1. Claims 2 and 4 are dependent upon claim 1, and thus include every limitation of claim 1. Therefore, claims 2 and 4 are also not anticipated by the cited reference.

Accordingly, it is respectfully requested that the rejection of claims 1, 2, and 4 under 35 U.S.C. § 102(b) as being anticipated by Matsuda, be reconsidered and withdrawn.

35 U.S.C. § 103(a) Rejection

The rejection of claims 5-9 under 35 U.S.C. § 103(a), as being unpatentable over Matsuda, is respectfully traversed based on the following.

Claims 5-9 are dependent upon claim 1 and thus include every limitation of claim 1. As noted above, the cited reference does not show or suggest a second heating process for causing a cholesteric fixed phase. To support a *prima facie* case for obviousness, the cited reference must show or suggest every element of the claim. MPEP §2143.03. Therefore, Matsuda does not support a *prima facie* case for obviousness of claims 5-9.

Accordingly, it is respectfully requested that the rejection of claims 5-9 under 35 U.S.C. § 103(a) as being unpatentable over Matsuda, be reconsidered and withdrawn.

New Claims

In contrast to the cited references, claim 22 includes:

a second heating process for abruptly heating at least a part of an area of the recording medium to a second temperature causing the liquid crystal to transit to a cholesteric liquid phase before the liquid crystal transitions to a crystal phase, wherein
said second temperature allows the area where the image has been formed by the first heating process to discolor or develop color without external pressure

Matsuda does not provide any parameters for the reheating step that produces the white color display state, much less show or suggest an abrupt second heating process. Therefore, claim 22 is patentably distinct from the cited references.

Support for new claim 22 can be found in paragraph [0023] of the specification.

Also in contrast to the cited references, claim 23 includes:

a second heating process for heating at least a part of an area of the recording medium to a second temperature, wherein
said second temperature causes the at least part of an area where the image has been formed by the first heating process to discolor or develop color without external pressure; and
a cooling process for cooling the at least part of the area to fix the image after the second heating process thereby causing the at least part of an area subject to the second heating process to exhibit a cholesteric fixed phase having a selective reflection property.

The cited references do not show or suggest a second heating process followed by a cooling process that causes a cholesteric fixed phase. Therefore, claim 23 is patentably distinct from the cited references.

Support for new claim 23 can be found in paragraphs [0027] and [0029] of the specification.

CONCLUSION

Wherefore, in view of the foregoing amendments and remarks, this application is considered to be in condition for allowance, and an early reconsideration and a Notice of Allowance are earnestly solicited.

This Amendment increases the number of independent claims by 2 from 6 to 8 and increases the total number of claims by 2 from 21 to 23, but does not present any multiple dependency claims. Accordingly, a Response Transmittal and Fee Authorization form authorizing the amount of \$500.00 to be charged to Sidley Austin Brown & Wood LLP's Deposit Account No. 18-1260 is enclosed herewith in duplicate. However, if the Response Transmittal and Fee Authorization form is missing, insufficient, or otherwise inadequate, or if a fee, other than the issue fee, is required during the pendency of this application, please charge such fee to Sidley Austin Brown & Wood LLP's Deposit Account No. 18-1260.

Any fee required by this document other than the issue fee, and not submitted herewith should be charged to Sidley Austin Brown & Wood LLP's Deposit Account No. 18-1260. Any refund should be credited to the same account.


If an extension of time is required to enable this document to be timely filed and there is no separate Petition for Extension of Time filed herewith, this document is to be construed as also constituting a Petition for Extension of Time Under 37 C.F.R. § 1.136(a) for a period of time sufficient to enable this document to be timely filed.

Any other fee required for such Petition for Extension of Time and any other fee required by this document pursuant to 37 C.F.R. §§ 1.16 and 1.17, other than the issue fee,

Application No. 10/081,699
Amendment dated June 23, 2005
Reply to Office Action of March 23, 2005

and not submitted herewith should be charged to Sidley Austin Brown & Wood LLP's
Deposit Account No. 18-1260. Any refund should be credited to the same account.

Respectfully submitted,

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June 23, 2005